UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUL 29 2010

REPLY TO THE ATTENTION OF:

WW-16J

U.S. Army Corps of Engineers, Louisville District
ATTN: Mr. Robert J. Brown, CELRL-OP-FW
P.O. Box 489
Newburgh, Indiana 47629-0489

Re: Public Notice No. LRL-2009-243-rjb / Black Beauty Coal Company, LLC-Knox Pit (Amendment 4)

Dear Mr. Brown:

The United States Environmental Protection Agency has reviewed Black Beauty Coal Company's (BBCC) "Response to EPA comments dated February 18, 2010" dated May 24, 2010 and revised Section 404 permit materials. EPA appreciates BBCC's response to our comments; however the following permit concerns remain:

Mining Plan

In general, the Operations Map approved January 13, 2010 is inconsistent with the mining plan detailed in the alternatives analysis section of the permit application and the impact table provided with the letter dated May 24, 2010. As such, the project as proposed cannot be evaluated for compliance with the 404(b)(1) Guidelines (the Guidelines). Below is a list of major inconsistencies between the revised permit application, Operations Map, and Impact Table:

1. **Alternative Mining Methods.** On page 13 of the revised permit application, BBCC states "Augering is not a feasible option at Knox Pit..." However, the operations map details a section with in the North Pit as a "Potential Auger Area." This auger area extends to the area that was to be avoided. EPA requests the operations plan, revision of the alternatives analysis to accurately include the methods that are available and planned for this site[1], and hydrology information such as the Cumulative Hydrologic Impact Analysis (CHIA) for the site. The CHIA should discuss the methods of and location of mining in relation to the water table and any impacts to the hydrology source(s) for the intermittent streams and wetlands.

2. **Potential Mining-North Pit.** The impact table indicated that 4,711 linear feet of jurisdictional streams (1NS9, 1NS9A, 1NS10, 1NS10-3, 1NS11, 1NS12, 1NS12A, 1NS12A-1, 1NS12B, 1NS12C) would be impacted by the "sediment-drainage control and

[1] 40 C.F.R. § 230.10(a)(2)

support area." Yet, the map indicates the area as "Potential Mining" and no other details regarding pit location, advancement, sediment basins, diversion ditches, or other support areas, are identified. EPA maintains that avoidance and mitigation efforts cannot be evaluated if there are no details on the activities planned in the area.

3. **Potential Mining-South Pit.** The Operations Map does not illustrate pit location, advancement, sediment basins, diversion ditches or support areas and is simply labeled as "Potential Mining." However, the Impact Table lists the type of impacts to the water resources within this same area. EPA asks that BBCC revise the Operations Map to include the details referenced in the impact table.

The issues and inconsistencies mentioned above highlight the disconnect between the permit application, impact table, and the mining plan. As such, avoidance and minimization efforts required by the Guidelines cannot be evaluated.[2] The permit application needs to be revised to match the operations plan and the operations plan needs to include more details in the areas that would impact water resources.

Mitigation

EPA does not agree with the use of agricultural channels with no buffers for stream mitigation. "Agricultural streams" must be revised to include natural stream design and buffers in order to be considered as mitigation. Further, the levees should be removed from the stream channels and the channels and their associated buffers be restored to account for loss of aquatic resource functions and values. Mitigation ratios need to be at a ratio greater than 1:1 for linear feet of stream impacts.[3] The mitigation should include an accounting of mitigation for each aquatic feature impacted.

Long term protection is required to protect both stream and wetland mitigation and their associated buffers. The applicant stated that the reference to a deed restriction was removed. EPA request information on the type of long term protection now offered on the mitigation proposal.[4]

Stream Assessment and Monitoring

The applicant must evaluate all the parameters in the EPA Rapid Bioassessment Protocol (EPA RBP). The applicant must set standards associated with the overall EPA RBP score for each reach stream segment assessed. The special conditions of the Corps permit should include general standards for the overall EPA RBP score for the mitigated reaches.

While EPA appreciates the revisions to the discussion section, the Biological Assessment Report still has not discussed why only three streams were sampled and why no streams located in the South Pit area were included in the assessment. Our October 7,

[2] 40 C.F.R. § 230.10(a)(2)
[3] 40 CFR 230.9 f(2)
[4] 40 C.F.R. § 230.91-230.98

2009 letter questioned how 30,000 linear feet of stream is represented by only three sample points. EPA expects that all streams containing water be sampled for biological communities and water chemistry (ex. conductivity, pH, DO, temperature, and turbidity among other samples required by the Indiana Department of Natural Resources for the SMCRA permit). If chemical (i.e. pH) or physical (i.e. no water) reasons why the stream was not sampled exist, then the applicant should simply detail the specific reason for the lack of sampling by stream reach. This level of completeness ensures that a detailed inventory and potential biological degradation or lift can be shown.

Causing or Contributing to Violations of State Water Quality Standards-40 C.F.R. §230.10(b)(1)

As you know, the Guidelines state that "no discharge of dredged or fill material may be permitted if it causes or contributes, after disposal site dilution and dispersion, to violations of any applicable State water quality standard."[5] "North" Indian Creek is proposed to be listed by the State of Indiana as impaired for sulfates. During mining, sediment concentrations and load rates increase dramatically compared to the pre-mining condition.[6] Increased erosion and transport of sediments associated with mining can alter the flow rate of stream channels downstream, transport chemicals downstream, and adversely affect downstream aquatic ecosystems. Studies have found that more frequent, higher daily flow volumes occur during the active phases of mining compared to pre-mining conditions.[7] The increased sediment transport can be attributed to the extensive land disturbance (ex. blasting and spoil dumping) and loss of vegetative cover.

On Page 4 of the permit application, the applicant states that "recent studies on several modern Midwestern coal mines found no significant effects on aquatic life associated with coal mine effluent." The document referenced is the U.S. Department of Agriculture-Natural Resource Conservation Service's *Rapid Watershed Assessment Lower White River Watershed.* EPA is familiar with the document and surface coal mining is not referenced.

The "North" Indian Creek flows along the northern limits of the permit boundary and is a direct tributary to the White River which flows through a substantial portion of Indiana. The White River is listed by the State of Indiana Natural Resources Commission as an Outstanding River. In 1997, the White River was named one of American Rivers "Most endangered and threatened rivers," due in part to loss of riparian areas and water withdrawals. "Excessive amounts of sediments, nutrients and bacteria degrade the water quality of the Lower White River watershed causing an unbalanced fish community with depressed populations with a limited diversity."[8] The applicant must document how they will not cause or contribute to further impairment of the White River or its tributaries

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[5] 40 C.F.R. §230.10(b)(1)

[6] Bonta, James V., 2000. "Impact Of Coal Surface Mining And Reclamation On Suspended Sediment In Three Ohio Watersheds." *Journal of the American Water Resources Association* (JAWRA) 36(4): 869-887.

[7] Bonta, James V., C. R. Amerman, T. J. Harlukowicz, and W. A. Dick, 1997. Impact of Coal Surface Mining on Three Ohio Watersheds-Surface-Water Hydrology. *Journal of the American Water Resources Association* (JAWRA) 33(4): 907-917.

[8] http://www.in.nrcs.usda.gov/technical/RWA/Lower%20White/Lower%20White.pdf

utilizing operational, hydrological, sediment and erosion control BMPs (among other efforts).

In conclusion, EPA continues to object to the issuance of a permit for the project as proposed. While we recognize that BBCC has addressed some of our comments, there are important unresolved issues that must be addressed before an informed permit decision can be made. EPA is open to discussions with the applicant and the Corps to resolve these outstanding issues. Please feel free to contact Andrea Schaller at (312) 886-0746 or Melissa Gebien at 312-886-6833 with any questions.

Sincerely,

Peter Swenson, Chief
Watersheds and Wetlands Branch

cc: Marylou Poppa Renshaw, IDEM
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